



Multisectoral Malaria Project; Malaria and Rice Agriculture, Karonga, Malawi

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Presentation Outline

- ☐ Background/Overview
- ☐ Objectives
- ☐ Methodology
- ☐ Results
- ☐ Conclusion/Next steps

Background/overview of the project

- Malaria is a major public health problem in Malawi, accounts for 36% of all OPD visits and 1.1% of all global malaria deaths.
- Location of vector breeding, relative to human populations, is one of the factors that affect malaria parasite transmission.
- Irrigation agriculture can create favorable breeding habitats for mosquitoes at the same time promotes economic growth, enhance food security and alleviate poverty.
- Studies in sub-Saharan Africa including Malawi have shown increase in malaria risk and malaria vectors abundance associated with rice irrigation.
- This justifies need to design and implement interventions that promote growing rice while mitigating the associated malaria risk.

Objectives

To determine malaria risks attributed to agricultural rice production within households:

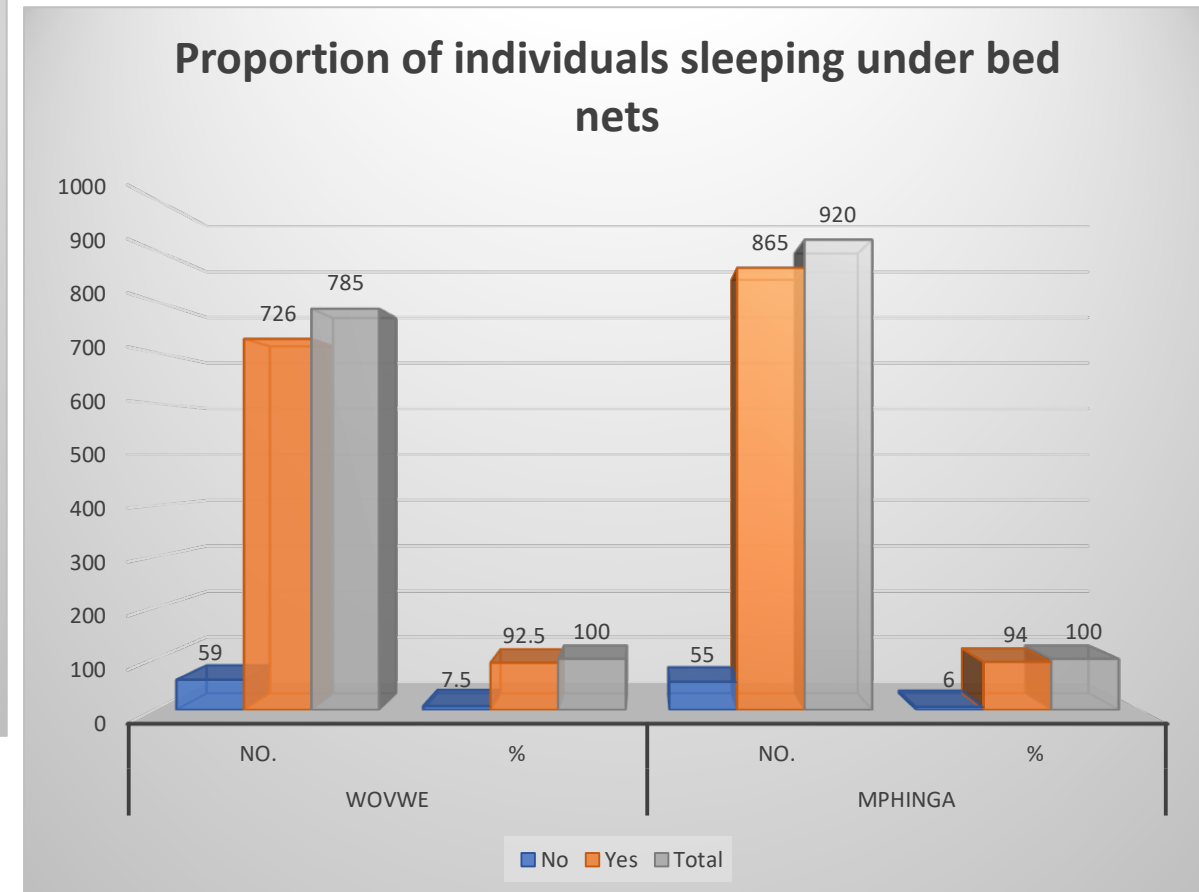
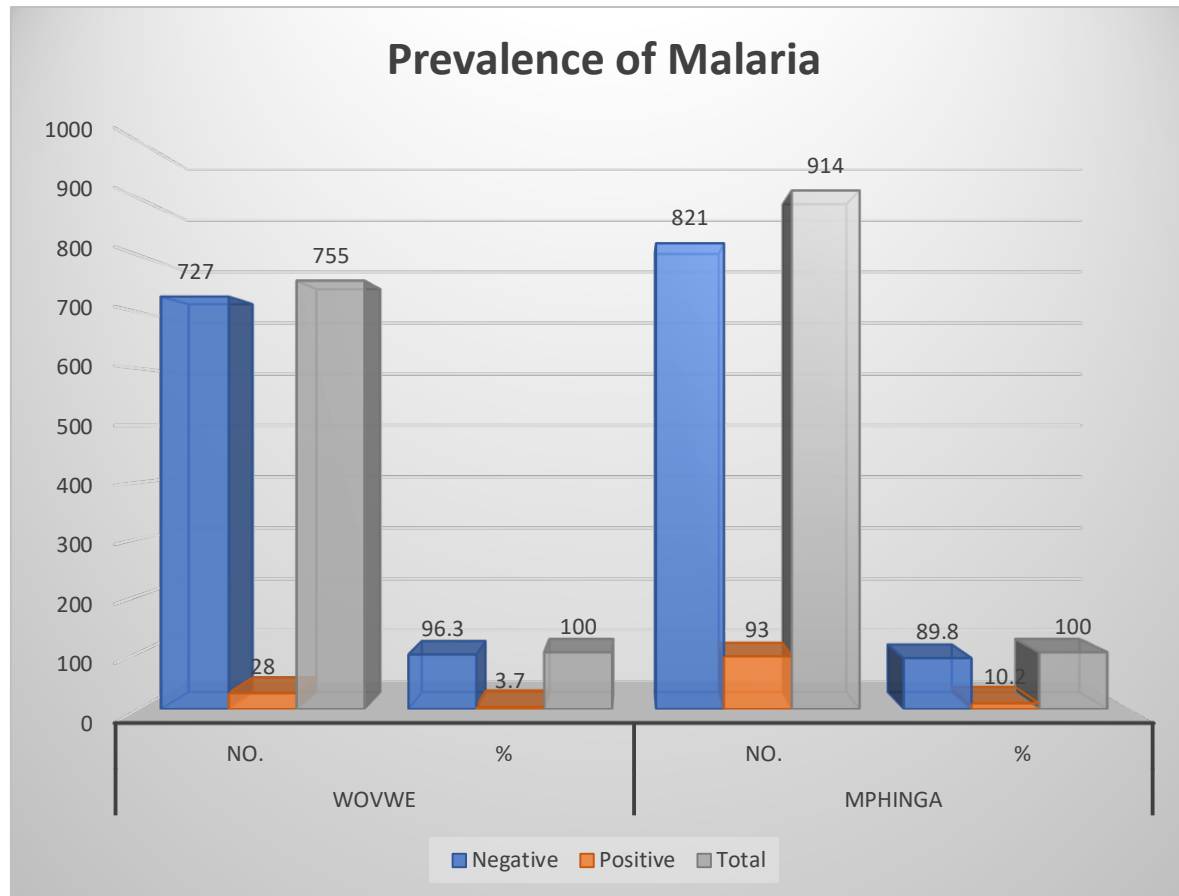
- To evaluate the effect of proximity of human dwellings (households) to rice irrigation on prevalence of malaria infection among household members in rice irrigation schemes in Karonga district;
- To assess the effect of proximity of human dwellings (households) to rice irrigation on indoor densities of *Anopheles* mosquitoes in rice irrigation schemes in Karonga district



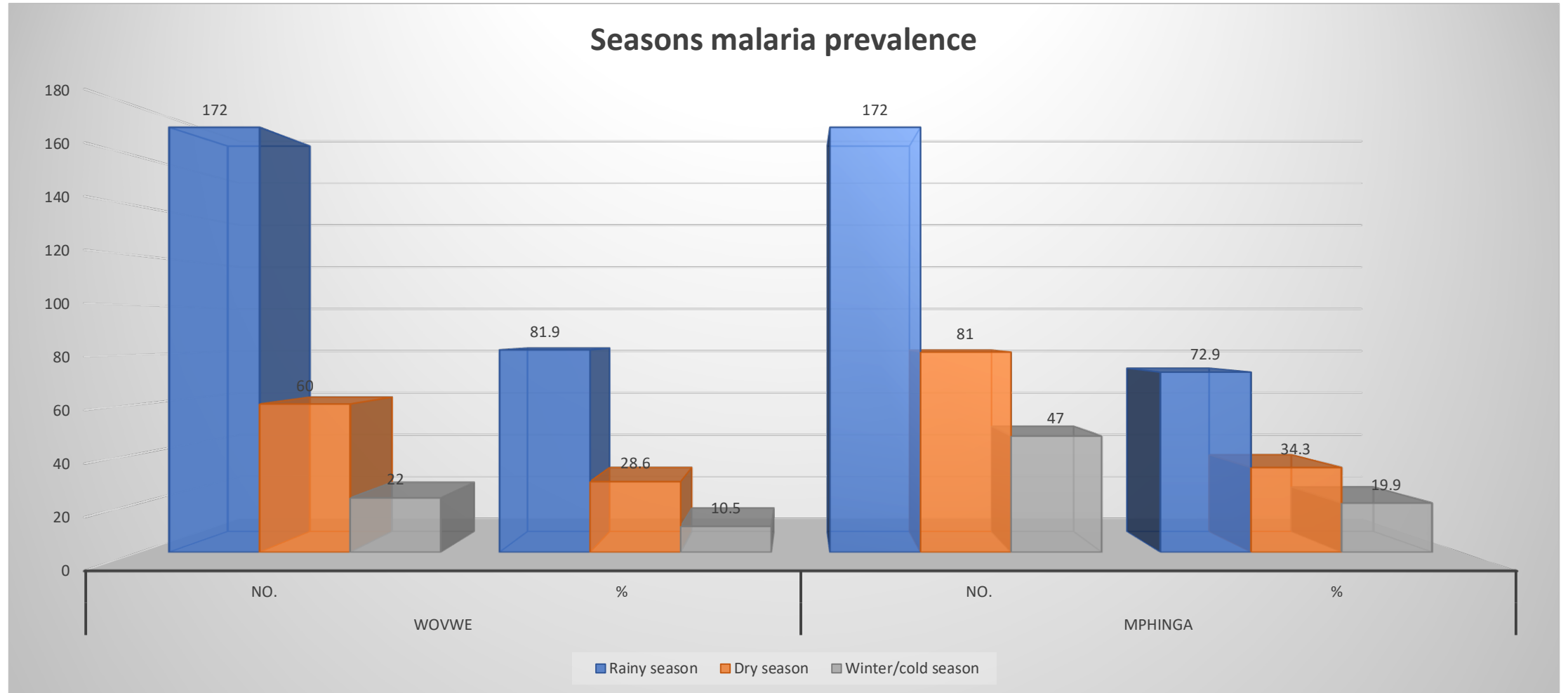
Methodology

- Cross-sectional
- Two schemes, two surveys: rainy and dry season
- Data collection:
 - Individual
 - mRDT and Malaria treatment
 - Malaria Disease: Passive case detection
 - Participant LLIN usage
 - Human biting rates
 - Household
 - Household LLIN coverage
 - Net assessment: LLIN physical integrity
 - Socioeconomic and KAP on malaria
 - mean number of *Anopheles* captured per house

Results

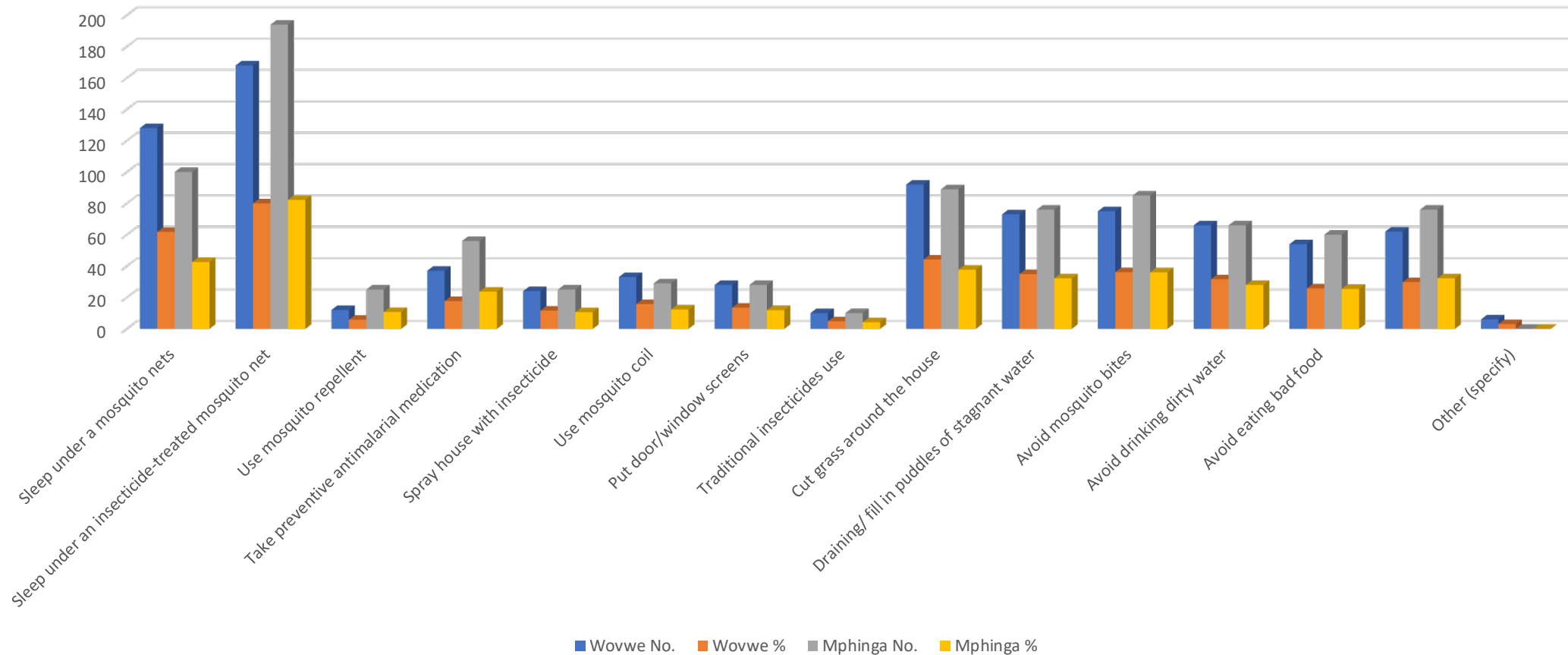


Results contd...



Results

Malaria prevention methods



Conclusion/Next steps

- Malaria cases (3.7%) though deemed low during the time of data collection, are still higher than the national statistic of 1.8%
- Data analysis for the first round is continuing
- Second round of data collection in March/April (rainy season).
- Improve linkages between MOH and MOA to increase awareness on the rice irrigation agriculture impact on malaria
- Plans to deploy relevant potentially impactful Malaria interventions in rice schemes using results.

Questions

Thank You

